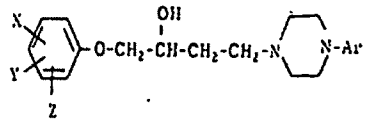
88-149149/22 B03 ROBN 21.11.86
ROBINS A H CO INC *EP -269-383-A
21.11.86-US-933180 (01.06.88) A61k-31/49

1-Phenoxy-4(4-arylpiperazinyl)-2-butanol - used esp. in medicament for combatting type I allergic response in host

C88-066435 R(BE CH DE FR GB IT LI NL)

B(7-D5, 12-A7, 12-D2, 12-D6, 12-K2, 12-L4) N(1-A1)

Use of a 1-phenoxy-4-(4-arylpiperazinyl)-2-butanol of formula (I) in the prepn. of a medicament for combatting Type I allergic response in a host is new.



(I)

Ar = -$C_6H_2(X^1)(Y^1)(Z^1)$ or 2-, 3- or 4-pyridyl;
X, X^1 = H, 1-8C alkyl, 1-8C alkoxy, halogen, CF_3, NO_2, NH_2, MeCONH, Ph, X^{11},$Y^{11}C_6H_3$, MeCO, CN, $CONH_2$, COOH or (1-8C)alkoxycarbonyl;
Y, Y^1, Y^{11} and X^{11} = X substit. other than opt. substd. Ph;
Z, Z^1 = H, 1-8C alkyl or 1-8C alkoxy.

A salt and/or hydrate of (I) may also be used.

MORE SPECIFICALLY

Y = H, 1-8C alkyl or halogen;
Z = H, 1-8C alkyl or NO_2;
Y^1 = H, halogen or 1-8C alkoxy.

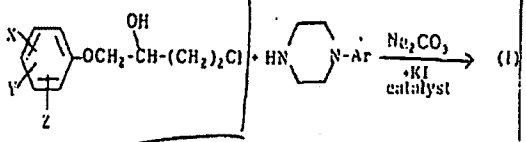
The use of 50 specific cpds. (I) is claimed, including 1-(2-chlorophenoxy)-4-(4-phenyl-1-piperazinyl)-2-butanol (Ia).

USE

(I) cause a decrease in the release of histamine and antagonise end organ effects of mediators involved in the immediate hypersensitivity response. They are therefore useful for treating allergic asthma, rhinitis, atopic dermatitis, chronic hives and allergic conjunctivitis.

Dose is 4-160 mg daily.

PREPARATION



EXAMPLE

Ko-chlorophenoxy)-2-hydroxybutyl chloride (35.1g), N-phenylpiperazine (32.6g) and i-PrOH(400 ml) were refluxed together for 48 hrs., then kept overnight at 0°C and filtered.

The filtrate was treated with HCl/Et_2O and Et_2O, and the solid prod. was sepd., dissolved in dil. HCl and neutralised with aq. NaOH to give 3.6g of (Ia), m.pt. 100-101.5°C after recrystn. from i-PrOH.(30pp1248HDDwgNo0/0).

(E)ISR: No Search Report.